

CLAIMS

I claim:

1. An apparatus for remotely operating a circuit protection device having contacts movable from a closed position to an open position upon receiving current greater than a trip current, the circuit protection device having a load side and a source side and being connected between a power source and a load being operated
5 by the power source, the apparatus comprising:

an impedance limiter having a first end connected to the load side of the circuit protection device; and

a switching device connected between a second end of the impedance limiter and the power source, the switching device being operable between an open
10 position and a closed position,

wherein when the switching device is in the closed position, the impedance limiter is connected between the circuit protection device and the power source to draw current through the circuit protection device sufficient to move the contacts of the circuit protection device to the closed position.

2. The apparatus of claim 1 wherein the switching device is an electronic relay operable between an open position and a closed position.

3. The apparatus of claim 1 further comprising a switching circuit coupled to the switching device, wherein the switching circuit is operable to control the movement of the switching device between the open position and the closed position.

4. The apparatus of claim 3 wherein the switching circuit monitors the value of the power source and operates the switching device based upon the value of the power source.

5. The apparatus of claim 1 wherein the impedance limiter is a resistor and the resistance of the resistor is selected based on the voltage generated by the power source such that the current drawn through the resistor when the resistor is connected across the power source exceeds the trip current for the circuit protection device.

6. The apparatus of claim 1 wherein the impedance limiter is positioned in parallel with the load across the power source.

7. The apparatus of claim 1 wherein the impedance limiter and the switching device are located externally from the circuit breaker.

8. The apparatus of claim 1 wherein the impedance limiter is a resistor.

9. A method of remotely actuating a circuit protection device to move the contents of the circuit protection device from a closed position and an open position, the circuit protection device being movable from the closed position to the open position upon receiving current greater than a trip current, the circuit protection device being positioned between a power source and a load, the method comprising the steps of:

connecting an impedance limiter to the circuit protection device;

positioning a remotely operable switching device between the impedance limiter and the power source, the combination of the switching device and the impedance limiter being connected in parallel with the load across the power source; and

remotely actuating the switching device to move the switching device from an open position to a closed position, wherein when the switching device is in

the closed position, the impedance limiter is connected across the power source to
15 draw current from the power source through the impedance limiter,

wherein the impedance limiter is selected such that the current drawn through the impedance limiter upon closing of the switching device is greater than the trip current for the circuit protection device.

10. The method of claim 9 further comprising the step of connecting a switching circuit to the switching device, wherein the switching circuit controls the movement of the switching device between the open and closed positions.

11. The method of claim 9 wherein the switching device and the impedance limiter are located externally from the circuit protection device.